

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method of recording data to a computer readable storage medium comprising:

identifying time-series information;

carrying out data compression on the time-series information including, generating management information and additional information, said management information for use in a decoding/reproduction process for decoding and reproducing said time-series information, said additional information including a predetermined condition when said time-series information is retrieved; and

recording said time-series information once compressed, said management information, and said additional information onto the computer readable storage recording medium,

said management information and said additional information being recorded ~~in at least one of logical and physical positions~~ next to each other in respective predetermined decoding/reproduction units.

Claim 2 (Original): The recording method according to claim 1 wherein,

data of a read/write unit serving as a unit, in which data is written onto said recording medium and read out from said recording medium, includes a plurality of said decoding/reproduction units of said time-series information; and

the sequence of pieces of data included in said decoding/reproduction units pertaining to said read/write unit in a time-series direction is changed.

Claim 3 (Previously Presented): The recording method according to claim 1 wherein said management information added to data of said decoding/reproduction unit as management information for said decoding/reproduction process is time management information on a reproduction/output timing of said data.

Claim 4 (Original): The recording method according to claim 2 whereby additional information for data of said predetermined-interval decoding/reproduction unit is recorded by placing management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units at a predetermined location in data of said read/write unit.

Claim 5 (Previously Presented): The recording method according to claim 2 wherein, data of said read/write unit comprises a plurality of packets; and additional information for data of said predetermined-interval decoding/reproduction unit is recorded in data of said read/write unit as a packet including management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units.

Claim 6 (Previously Presented): The recording method according to claim 2 wherein, data of said read/write unit comprises a plurality of packets; a specific packet is selected among said packets of said time-series information completing said data compression; and additional information for data of said predetermined-interval decoding/reproduction unit is recorded at a location determined as a location relative to said specific packet

including management information for a decoding/reproduction process for a corresponding one of said decoding/reproduction units.

Claim 7 (Previously Presented): The recording method according to claim 1 wherein said additional information includes at least information on a time at which data of said decoding/reproduction unit of said time-series information is acquired.

Claim 8 (Previously Presented): A recording method according to claim 1 wherein said additional information includes information on a condition in which data of said decoding/reproduction unit of said time-series information is acquired.

Claim 9 (Previously Presented): The recording method according to claim 1 wherein, said time-series information is video information;
data of said decoding/reproduction unit is information of a field unit or a frame unit;
and
said data compression uses a correlation with data of said decoding/reproduction unit.

Claim 10 (Currently Amended): A recording apparatus comprising:
a data input device for receiving time-series information;
a data compression device for carrying out data compression on the time-series information;
a management-information generation device for generating management information for use in a decoding/reproduction process for decoding and reproducing said time-series information;

an additional-information generation device for generating additional information that includes a predetermined condition when said time-series information is retrieved; and

a recording control device for recording said time-series information once compressed on a recording medium, and recording said management information generated by said management-information generation device and said additional information by said additional-information generation device next to each other on said recording medium ~~in at least one of logical and physical positions~~ in each of predetermined decoding/reproduction units.

Claim 11 (Previously Presented): The recording apparatus according to claim 10 wherein,

said recording control device generates data including a plurality of said decoding/reproduction units of said time-series information as data of a read/write unit serving as a unit, in which data is written onto said recording medium and read out from said recording medium; and

the sequence of pieces of data included in said decoding/reproduction units pertaining to said read/write unit in a time-series direction is changed.

Claim 12 (Previously Presented): The recording apparatus according to claim 10 wherein said management information added to data of said decoding/reproduction unit as management information for said decoding/reproduction process is time management information on a reproduction/output timing of said data.

Claim 13 (Previously Presented): The recording apparatus according to claim 11 wherein said recording control device records additional information for data of said

predetermined-interval decoding/reproduction unit by placing management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units at a predetermined location in data of said read/write unit.

Claim 14 (Previously Presented): The recording apparatus according to claim 11 wherein,

data of said read/write unit comprises a plurality of packets; and

said recording control device records additional information for data of said predetermined-interval decoding/reproduction unit in data of said read/write unit as a packet including management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units.

Claim 15 (Previously Presented): The recording apparatus according to claim 11 wherein,

data of said read/write unit comprises a plurality of packets;

a specific packet is selected among said packets of said time-series information completing said data compression; and

said recording control device records additional information for data of said predetermined-interval decoding/reproduction unit at a location determined as a location relative to said specific packet including management information for a decoding/reproduction process for a corresponding one of said decoding/reproduction units.

Claim 16 (Previously Presented): The recording apparatus according to claim 10 wherein said additional information includes at least information on a time at which data of said decoding/reproduction unit of said time-series information is acquired.

Claim 17 (Canceled).

Claim 18 (Previously Presented): The recording apparatus according to claim 10 wherein,

said time-series information is video information;

data of said decoding/reproduction unit is information of a field unit or a frame unit;

and

said data compression uses a correlation with data of said decoding/reproduction unit.

Claims 19-29 (Canceled).

Claim 30 (Currently Amended): A reproduction apparatus for a recording medium having recorded thereon, compressed time-series information, management information for a decoding/reproduction process to data included in each of decoding/reproduction units of said time-series information, and additional information that includes a predetermined condition when said time series information is retrieved, said management information and said additional information being recorded next to one another ~~in at least one of logical and physical positions~~, said apparatus comprising:

a read device for reading out said compressed time-series information and said additional information from said recording medium;

a separation device for separating said compressed time-series information and said additional information, which have been read out by said read device;

a decompression device for decompressing said compressed time-series information separated by said separation device;

a first reproduction/output device for reproducing and outputting said decompressed time-series information by using management information for said decoding/reproduction process; and

a second reproduction/output device for reproducing and outputting said additional information output by said separation device synchronously with an operation to reproduce and output data of said decoding/reproduction unit of said time-series information by using management information for said decoding/reproduction process.

Claim 31 (Currently Amended): A reproduction apparatus for a recording medium having recorded thereon, compressed time-series information, management information for a decoding/reproduction process to data included in each of decoding/reproduction units of said time-series information, and additional information that includes a predetermined condition when said time series information is retrieved, said management information and said additional information being recorded next to one another ~~in at least one of logical and physical positions~~, said apparatus comprising:

a read device for reading out said compressed time-series information and said additional information from said recording medium;

a separation device for separating said compressed time-series information and said additional information, which have been read out by said read device;

a decompression device for decompressing said compressed time-series information separated by said separation device;

a reproduction/output device for reproducing and outputting said decompressed time-series information by using management information for said decoding/reproduction process; and

a reproduction/control device for reproducing said additional information output by said separation device in synchronization with an operation to reproduce and output data of said decoding/reproduction unit of said time-series information by using management information for said decoding/reproduction process, and controlling data of a corresponding one of said decoding/reproduction units on the basis of said generated additional information.

Claim 32 (Currently Amended): An image pickup apparatus comprising:

an image pickup device;

a data compression device for carrying out a data compression process on image data output by said image pickup device;

a time-management information generation device for generating time-management information and additional information, said time-management information for use in a decoding/reproduction process for said image data, said additional information including a predetermined condition when said image data is retrieved; and

a recording control device for recording said image data once compressed on a recording medium, and recording said management information generated by said management information generation device and said additional information by said additional-information generation device next to each other on said recording medium ~~in at least one of logical and physical positions~~ in each of predetermined decoding/reproduction units.

Claim 33 (Previously Presented): The image pickup apparatus according to claim 32 wherein,

said recording control device generates data including a plurality of said decoding/reproduction units of said image data as data of a read/write unit serving as a unit,

in which data is written onto said recording medium and read out from said recording medium; and

the sequence of pieces of data included in said decoding/reproduction units pertaining to said read/write unit in a time-series direction is changed.

Claim 34 (Previously Presented): The image pickup apparatus according to claim 32 wherein said recording control device records additional information for data of said predetermined-interval decoding/reproduction unit by placing management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units at a predetermined location in data of said read/write unit.

Claim 35 (Previously Presented): The image pickup apparatus according to claim 32 wherein,

data of said read/write unit comprises a plurality of packets; and

said recording control device records additional information for data of said predetermined-interval decoding/reproduction unit in data of said read/write unit as a packet including management information for a decoding/reproduction process for data of a corresponding one of said decoding/reproduction units.

Claim 36 (Previously Presented): The image pickup apparatus according to claim 32 wherein,

data of said read/write unit comprises a plurality of packets;

a specific packet is selected among said packets of said compressed time-series information; and

said recording control device records additional information for data of said predetermined-interval decoding/reproduction unit at a location determined as a location relative to said specific packet including management information for a decoding/reproduction process for a corresponding one of said decoding/reproduction units.

Claim 37 (Previously Presented): The image pickup apparatus according to claim 32 wherein said additional information includes at least information on a time at which data of said decoding/reproduction unit of said image data is acquired.

Claim 38 (Canceled).

Claim 39 (Previously Presented): The image pickup apparatus according to claim 32 wherein,

data of said decoding/reproduction unit is information of a field unit or a frame unit;
and

said data compression process uses a correlation with data of said decoding/reproduction unit.

Claim 40 (Previously Presented): The recording method according to claim 1, wherein a data size of each additional information is constant.

Claim 41 (Previously Presented): The recording method according to claim 1, wherein said additional information follows said management-information in a logical position.

Claim 42 (Previously Presented): The recording method according to claim 1, wherein said additional information includes time information of said time-series information.

Claim 43 (Previously Presented): The recording method according to claim 1, wherein said additional information includes condition information of said time-series information.

Claim 44 (Previously Presented): The recording apparatus according to claim 10, wherein a data size of each additional information is constant.

Claim 45 (Previously Presented): The recording apparatus according to claim 10, wherein said additional information follows said management-information in a logical position.

Claim 46 (Previously Presented): The recording apparatus according to claim 10, wherein said additional information includes time information of said time-series information.

Claim 47 (Previously Presented): The recording apparatus according to claim 10, wherein said additional information includes condition information of said time-series information being generated.

Claim 48 (Previously Presented): The image pickup apparatus according to claim 32, wherein a data size of each additional information is constant.

Claim 49 (Previously Presented): The image pickup apparatus according to claim 32, wherein said additional information follows said management-information in a logical position.

Claim 50 (Previously Presented): The image pickup apparatus according to claim 32, wherein said additional information includes time information of said image data being generated by said image pickup device.

Claim 51 (Previously Presented): The image pickup apparatus according to claim 32, wherein said additional information includes condition information of said image data being generated by said image pickup device.